**R and D work on new fuels**

1016. SHRI SURESH PACHOURI: Will the Minister of ENERGY be pleased to state:

(a) whether any Research and Development work on new fuels on solar energy is underway in the country and if so, what are the details thereof; and

(b) whether oil industry (Shell) is using microbial enhanced oil recovery (EOR) techniques for injecting life into tired wells and if so, whether similar Research and Development efforts are in hand in the country?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) The Development of Non-Conventional Energy Sources has sponsored several projects on various aspects of new fuels based on solar energy. For example Solar Hydrogen—its production by photo-electrolysis and photobiological methods, storage through metal non-metal hydrides and development of suitable engines/burners for its utilisation; Bio-Solar fuels like ethanol and methanol—their production from sugar/starches ligno-cellulosic material and woody biomass and their utilisation in combustion engines.

(b) Some succesful trial of using microbial EOR techniques particularly in onland 'stripper' oil wells have been claimed by oil companies, (including the shell oil company) in USA, USSR and Eastern Europe. However development is still proceeding. In India also research projects are being carried out in the ONGC concerning microbial EOR.

**Posts reserved for ex-servicemen**

1017. SHRIMATI BIJOYA CHAKRAVARTY: Will the Minister of INDUSTRY be pleased to state:

(a) what was the number of posts reserved for the ex-servicemen in all public sector undertakings under the administrative control of the Department of chemicals and petro-chemicals during 1985-86; and

(b) what is the number of appointees from ex-servicemen in the above undertaking during 1985-86?

THE MINISTER OF STATE IN THE DEPARTMENT OF CHEMICALS AND PETRO-CHEMICALS IN THE MINISTRY OF INDUSTRY (SHRI R. K. JAI CHANDRA SINGH): (a) and (b) The information is being collected and will be laid on the Table of the House.

**Measures for reducing transmissionlosses**

1018. SHRIMATI BIJOYA CHAKARVARTY: Will the Minister of ENERGY be pleased to state:

(a) whether it is a fact that Government have set up a Committee to recommend measures for systematically reducing the very high transmission and distribution losses of power in the country; and

(b) if so, what are the details in this regard?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI): (a) Yes, Sir.

(b) A Committee comprising Chairman of Uttar Pradesh, Tamil Nadu and Bihar Electricity Boards, and representatives of the Central Electricity Authority, has been set up to go into the problems of high transmission and distribution losses in the country. The terms of reference assigned to the Committee are as under:—

(i) To recommend steps for the rigorous enforcement of the amendments in the Indian Electricity Act, 1910 making theft of energy a cognizable offence and providing for strignent punishment.

(ii) To identify system improvement schemes required to be implemented and to quantify the requirements of funds for implementing these schemes.

(iii) To recommend measures to improve the energy accounting procedures and the qaulity of indigenous energy meters for reduction transmission and distribution losses.